

## Book Review

**Rochlitz, Irene, Ed. 2005. *The Welfare of Cats. Animal Welfare*, Vol 3. Springer.**

This is the third volume in the series *Animal Welfare by Species*, edited by Clive Phillips, and the first on a companion animal species. In her Foreword, editor Irene Rochlitz claims that this volume was written with researchers, animal welfare organizations and cat owners in mind, and it certainly will be useful to all of those and more. Before going into detail, I would like to commend the editor and all of the contributors for producing an extremely readable, up-to-date review and interpretation of our current knowledge about domestic cats, and how it applies to all aspects of cat welfare in all situations in which they live and are housed.

Chapter 1 by S.L. Crowell-Davis is more or less an introductory review of cat social behaviour including social organization, communication and behavioural ontogeny. Although a very concise and useful summary, it unfortunately does not include the latest findings (e.g. still relying on the first edition of Turner & Bateson's *The Domestic Cat*, 1988, rather than the second edition, 2000, Cambridge University Press), and the printed photo quality in this chapter is very poor even though the photos illustrate important behavioural interactions. The chapter does, however, include many good (and still valid) suggestions for future research.

Chapter 2 by R.A. Casey and J.W.S. Bradshaw is an appropriate introduction to how one might/should assess cat welfare. Basically, two approaches have been taken to date: using behavioural and physiological measures of stress, e.g. the composite Cat-Stress-Score, and prediction of welfare by the degree of 'fit' between the cat's current and ancestral environment. The authors make a good case for better integration of behavioural and physiological (usually urinary cortisol) indicators of stress, as well as for the development of new measures which account for individual differences.

P. Bernstein presents an excellent and extensive review about the human-cat relationship in Chapter 3 and shows how diversely it can affect the cat's welfare. She makes the case for responsible pet ownership and discusses failures of the relationship: animal abusers and hoarders, and relinquishment to animal shelters. She also addresses the issue of allowing cats outdoors, but only cites US community positions. Many European nations and animal welfare specialists have very different opinions on this, as well as on the 'declawing' of cats.

Chapter 4 by S. Heath stresses that behavioural changes and behaviour problems are important indicators of feline welfare. The author correctly distinguishes between behaviour problems and normal behaviour that simply disturbs owners, and makes a good case for education of owners as well as veterinarians on these topics. The chapter presents a useful overview of the most frequent problems and makes suggestions to help prevent them in the first place. It also discusses in sufficient detail the relationship between health, disease and

behaviour, a topic rarely covered by other books on cat behaviour and behaviour problems.

P.H. Kass (Chapter 5) reports on a serious cat welfare issue, at least in the US and UK, namely that of overpopulation – as reflected in increasing numbers of largely healthy cats relinquished to shelters and being euthanized. This is the main cause of death for felines in the US, with estimates ranging between 5 and 9.5 million cats per year being put down. He first defines what he means by ‘cat overpopulation’: the existence of cats that are at risk of euthanasia because they are both unwanted and not owned. He presents the problem of, and solution to, uncontrolled breeding, and a good review of the determinants of relinquishment to, and adoption of cats from, shelters. Kass stresses the need to re-educate the American public about the importance and value of their pet’s life, emphasizing that the animals are not dispensable/disposable items.

In Chapter 6, M.R. Slater considers the welfare of feral cats and the controversial issue in many countries of their control. The author’s definition of a ‘feral’ cat is pragmatic: one that cannot be handled and is not suitable for placement into a home, in other words, a cat which is unsocialized. She first states why feral cats need to be controlled, then reviews the results of various methods to do that and comes to the conclusion that trap, neuter and return (TNR), together with adoption and monitoring programs, are the most effective and humane options for their long-term control. The author also objectively reviews the literature on various aspects of the effects of feral cats on wildlife, public health and zoonotic disease transmission and the welfare of the feral cats themselves, especially their health status.

Chapter 7, by the editor herself, is an extensive, objective and well-balanced review of cat welfare under all housing conditions found today. Rochlitz draws on ethological principles, the evolutionary history of the cat and studies of cats living under different conditions to describe the cats’ needs with respect to quantity and quality of space, contact with conspecifics and with humans, and sensory, occupational and nutritional input. She specifically addresses housing in research facilities and shelters (including single vs. group housing) and in the private setting, and presents an objective evaluation of the arguments for indoor-only vs. outdoor access housing of cats.

K. Sturgess presents an excellent overview in Chapter 8 of a topic barely touched upon in most cat books: how both infectious and non-infectious diseases affect the welfare of individual cats and, in the case of infectious disease, how it affects populations of cats in the wild, in breeding and boarding catteries, in shelters and in multi-cat households. The principles of infectious disease prevention, the methods of infectious disease spread and control and both prevention and control in high risk groups are succinctly presented. The topics of non-infectious disease and pain are also covered.

Chapter 9 by K. Sturgess and K.J. Hurley covers a further important aspect for cat welfare often neglected in other cat books: nutrition. As obligate carnivores, domestic cats have specific needs and narrower tolerance ranges for nutrients than either dogs or humans. This review of the nutritional needs of cats is based upon their natural feeding behaviour and top-level research in physiology. It provides a succinct, easily readable summary on each nutrient, including vitamins and trace elements. The authors then consider the special needs of kittens, the adult and the geriatric cat and finally the problems of obesity and feeding of sick cats.

In the final chapter, A. Steiger bases his review and recommendations on breeding and welfare on the ‘European Convention for the Protection of Pet Animals’. This chapter

contains useful (and not widely known) lists of the characteristics of extreme breed types of cats and their genetically based defects. It should be required reading for all breeders and breeding associations.

“The Welfare of Cats” closes with a index that includes the most important subjects and key words. Without a doubt this book represents a significant contribution to the domestic cat literature, and as the first (and only) book on cat welfare, will find a wide audience amongst both professionals and lay persons alike. The editor and contributors have done a fine job about which little criticism can be made.

*Dennis C. Turner  
Animal Behavior  
Institute of Zoology and  
University of Zurich  
Institute of Applied Ethology and  
Animal Psychology  
I.E.A.P., Switzerland*

